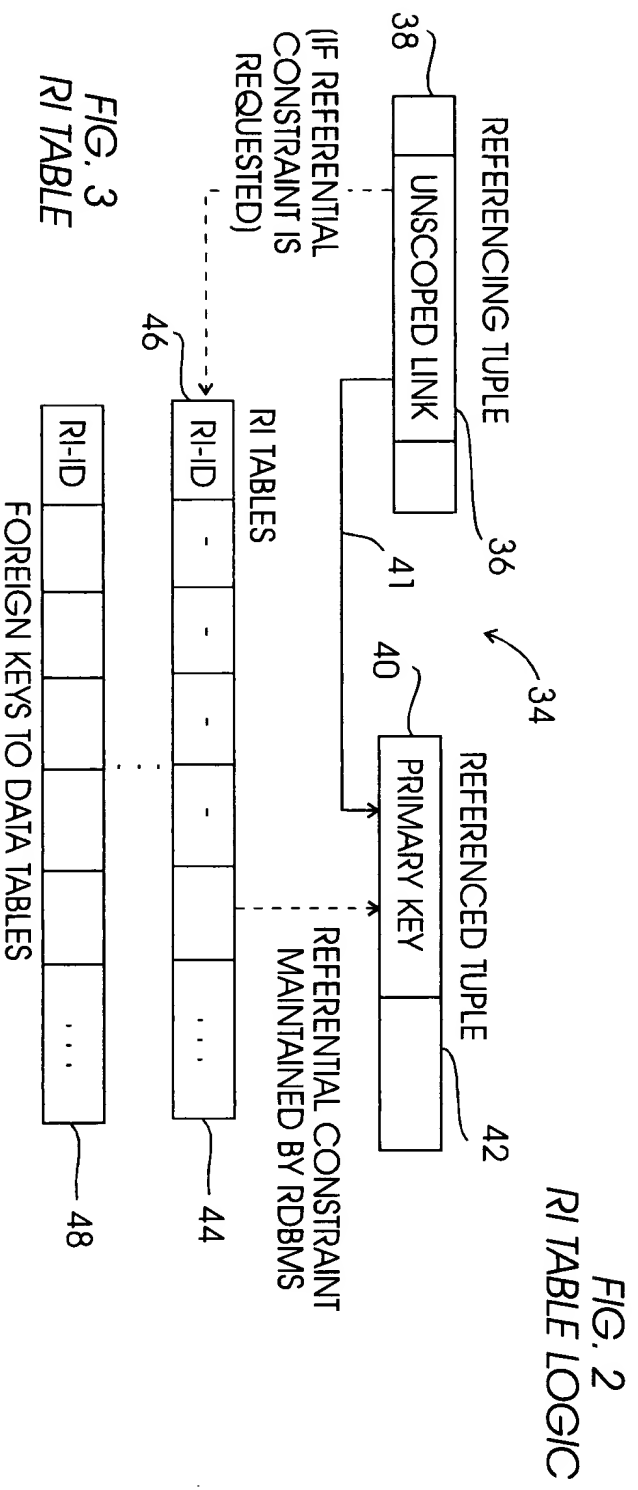


```

graph TD
    500[CREATE RI TABLE] --> 501[FOR EACH TABLE CREATED OR USED BY IMS, DO]
    501 --> 502[ADD TO RI TABLE FOREIGN KEY COLUMN REFERRING TARGET DATA TABLE]
  
```



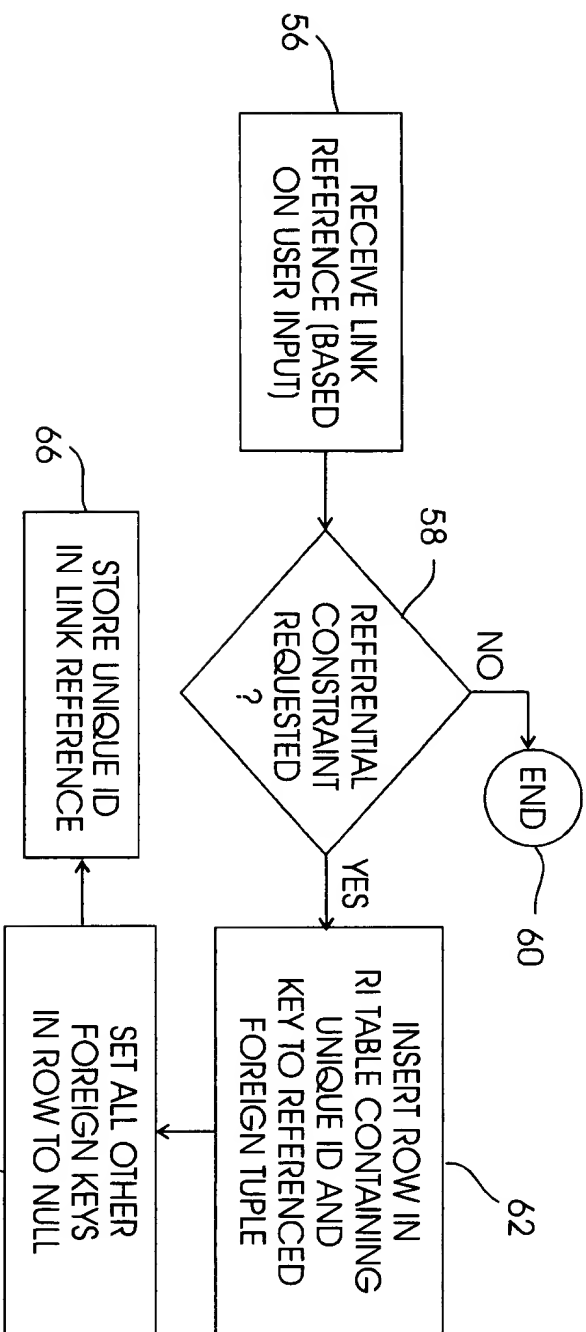


FIG. 4
RI TABLE OPERATION

Name of the Field	Field Size	Byte Numbers	Description
LinkID	16	0 to 15	Unique identifier for the unscoped link
LinkTableName	18	16 to 33	Name of the linktable in which entry for this link will reside
TargetTableName	18	34 to 51	Name of the target table
TargetID	8	52 to 59	Primary key of the target tuple
DeleteSemantics	1	60	'1' indicates RESTRICT '2' indicates SET NULL '3' indicates CASCADE
NeedRllIndicator	1	61	'1' if referential integrity needs to be maintained for this link. '0' otherwise
LinkType	4	62 to 65	User-specified Integer
Unused	4	66 to 69	For future use and expansion

FIG. 5

LIST 10	SOURCE TABLE NAME	SOURCE ID	SOURCE COLUMN NAME	DEST. TABLE NAME	DEST. TABLE 10	DEL SEM
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FIG. 6

SCOPEID	TABLENAME
10	THESES
10	CONF PAPERS
10	SURVEYS
10	TECH REPS
10	JOURNAL PAPERS

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TABLENAME	UNLINKCOLNAME	SCOPEID	DELSEM
STUDENTPUBS	PUB	10	'1'
FACULTYPUBS	PUB	10	'1'

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FIG. 8

FIG. 7



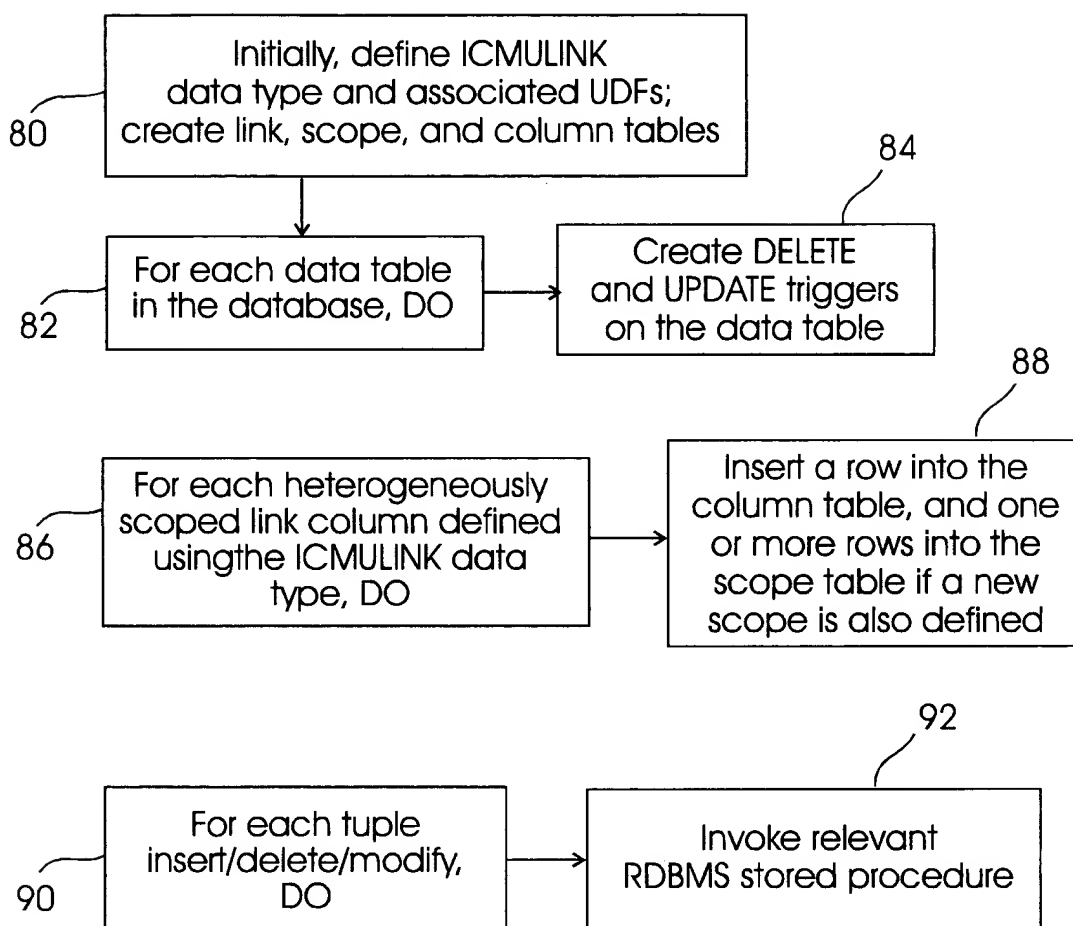


FIG. 9
ALTERNATE LOGIC